

IFWO

RAW SEQUENCE LISTING

DATE: 10/15/2004 TIME: 10:22:28

PATENT APPLICATION: US/10/645,012

Input Set : N:\Crf3\RULE60\10645012.RAW.txt
Output Set: N:\CRF4\10152004\J645012.raw

1 <110> APPLICANT: Tsuchiya, Masayuki Saito, Mikiyoshi Ohtomo, Toshihiko 4 <120> TITLE OF INVENTION: NOVEL METHOD FOR GENE CLONING 5 <130> FILE REFERENCE: 06501-070001 6 <140 > CURRENT APPLICATION NUMBER: 10/645,012 7 <141> CURRENT FILING DATE: 2003-08-21 THE MAN AND THE PARTY OF THE PA 8 <150> PRIOR APPLICATION NUMBER: US/09/700,820 9 <151> PRIOR FILING DATE: 2000-11-20 10 <150> PRIOR APPLICATION NUMBER: PCT/JP99/02341 11 <151> PRIOR FILING DATE: 1999-04-30 12 <150> PRIOR APPLICATION NUMBER: JP 10/138652 13 <151> PRIOR FILING DATE: 1998-05-20 14 <150> PRIOR APPLICATION NUMBER: JP 10/279876 15 <151> PRIOR FILING DATE: 1998-10-01 16 <160> NUMBER OF SEQ ID NOS: 39 18 <210> SEQ ID NO: 1 19 <211> LENGTH: 15 20 <212> TYPE: PRT 21 <213> ORGANISM: Artificial Sequence 22 <220> FEATURE: 23 <223> OTHER INFORMATION: Description of Artificial Sequence: Peptide Linker Sequence 24 <400> SEQUENCE: 1 25 Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser 26 5 28 <210> SEQ ID NO: 2 29 <211> LENGTH: 1035 30 <212> TYPE: DNA 31 <213> ORGANISM: Homo sapiens 32 <220> FEATURE: 33 <221> NAME/KEY: CDS 34 <222> LOCATION: (1)..(1035) 35 <400> SEQUENCE: 2 36 Met Leu Ala Val Gly Cys Ala Leu Leu Ala Ala Leu Leu Ala Ala Pro 37 38 39 gga gcg gcg ctg gcc cca agg cgc tgc cct gcg cag gag gtg gca aga 96 40 Gly Ala Ala Leu Ala Pro Arg Arg Cys Pro Ala Gln Glu Val Ala Arg 41 20 25 42 gge gtg etg ace agt etg eea gga gae age gtg act etg ace tge eeg 144 43 Gly Val Leu Thr Ser Leu Pro Gly Asp Ser Val Thr Leu Thr Cys Pro 44 40

ggg gta gag deg gaa gad aat ged act gtt dad tgg gtg dtc agg aag

45

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46 47	Gly	Val	Glu	Pro	Glu	Asp	Asn 55	Ala	Thr	Val	His	Trp	Val	Leu	Arg	Lys		
48	ccq		gca	aac	taa	cac		age	aga	taa	act		ato	aas	200	agg		240
49	Pro	Ala	Ala	Glv	Ser	His	Pro	Ser	Ara	Trn	Δla	Glv	Met	Gl	ayy Ara	Arg		240
50	65			1	201	70	-10	001	9	111	75	Ory	Met	GIĀ	Arg	80 80		
51		cta	ct.a	agg	tca		cad	ctc	cac	aac		aa a	220	+ -+	+ 00	tgc		200
52	Leu	Leu	Leu	Ara	Ser	Val	Gln	Leu	His	yac ∆en	Ser	99a	Aac	Tur	Cox	Cys		288
53				3	85		0111	шеа		90	361	GIY	Abii	ıyı	95	Cys		
54	tac	caa	add	aac		cca	act	aaa	act		Cac	tta	ata	ata		gtt		226
55	Tyr	Arg	Ala	Glv	Ara	Pro	Ala	Glv	Thr	Val	His	Len	T.e.11	y cy	yar Nan	Val		336
56	-			100	5			V-1	105			пси	шса	110	дал	vai		
57	ccc	CCC	qaq	qaq	ccc	caq	ctc	taa	_	ttc	caa	aag	agc		ctc	agc		384
58	Pro	Pro	Glu	Glu	Pro	Gln	Leu	Ser	Cvs	Phe	Ara	Lvs	Ser	Pro	Len	Ser		204
59			115					120	- 1 -		9		125		пси	DCI		
60	aat	gtt	gtt	tgt	qaq	tgg	ggt	cct	caa	agc	acc	сса		cta	acq	aca		432
61	Asn	Val	Val	Cys	Glu	Trp	Gly	Pro	Arq	Ser	Thr	Pro	Ser	Leu	Thr	Thr		102
62		130				_	135					140						
63	aag	gct	gtg	ctc	ttg	gtg	agg	aaq	ttt	caq	aac	aqt	cca	acc	gaa	gac		480
64	Lys	Ala	Val	Leu	Leu	Val	Arg	Lys	Phe	Gln	Asn	Ser	Pro	Ala	Glu	Asp		100
65	145					150					155					160		
66	ttc	cag	gag	ccg	tgc	cag	tat	tcc	cag	gag	tcc	cag	aaq	ttc	tcc	tac		528
67	Phe	Gln	Glu	Pro	Cys	Gln	Tyr	Ser	Gln	Glu	Ser	Gln	Lys	Phe	Ser	Cys		
68					165					170			-		175	1		
69	cag	tta	gca	gtc	ccg	gag	gga	gac	agc	tct	ttc	tac	ata	gtg	tcc	atq		576
70	Gln	Leu	Ala	Val	Pro	Glu	Gly	Asp	Ser	Ser	Phe	Tyr	Ile	Val	Ser	Met		
71				180					185					190				
72	tgc	gtc	gcc	agt	agt	gtc	ggg	agc	aag	ttc	agc	aaa	act	caa	acc	ttt		624
73	Cys	Val	Ala	Ser	Ser	Val	Gly	Ser	Lys	Phe	Ser	Lys	Thr	Gln	Thr	Phe		
74			195					200					205					
75	cag	ggt	tgt	gga	atc	ttg	cag	cct	gat	ccg	cct	gcc	aac	atc	aca	gtc		672
76	GIn	Gly	Cys	Gly	Ile	Leu		Pro	Asp	Pro	Pro	Ala	Asn	Ile	Thr	Val		
77		210					215					220						
78	act	gcc	gtg	gcc	aga	aac	CCC	cgc	tgg	ctc	agt	gtc	acc	tgg	caa	gac		720
79		Ala	Val	Ala	Arg		Pro	Arg	Trp	Leu		Val	Thr	Trp	Gln	Asp		
80	225					230					235					240		
81	CCC	cac	tcc	tgg	aac	tca	tct	ttc	tac	aga	cta	cgg	ttt	gag	ctc	aga		768
82	Pro	HIS	ser	Trp		Ser	Ser	Phe	Tyr		Leu	Arg	Phe	Glu		Arg		
83	+ - +	~~~			245					250					255			
84 85	Turk	cgg ^~~	gct	gaa	cgg	tca	aag	aca	ttc	aca	aca -	tgg	atg	gtc	aag	gac		816
86	TYL	Arg	Ата	GIU	Arg	ser	гуѕ	Thr	Phe	Thr	Thr	Trp	Met		Lys	Asp		
87	ata	a2a	ast	260	+ ~ +				265					270				
88	Leu	Cln	Uic	Ude	Cur	gtc	atc	cac	gac	gcc	tgg	agc	ggc	ctg	agg	cac	i	864
89	пец	GIII	275	птр	Cys	Val	тте		Asp	Ala	Trp	ser	_	Leu	Arg	Hıs		
90	ata	ata		att	aat	~~~	a > ~	280	~~~				285					
91	y v y	Val	Gln	LAU	Ara	315	Cln	gag	gag Glu	Dho	999	caa	ggc	gag	tgg	agc		912
92	VUI	290	O T 1 I	⊒eu	nr y	ліа	295	GIU	GIU	FIIE	атХ		σтХ	GIU	rrp	ser		
93	gag		age	aaa	nan	aca		aaa	acg	ac+	+~~	300	~~-	.				266
94	Glu	Trn	Ser	Dro	Glu	900 Ala	Met	23°	Thr	Dro	ugg Tr∽	aCa Th⊶	yaa ci	Com	agg	agt	,	960
	O L U	P	JUL	210	JIU	мта	MEC	GTÀ	TIIT	FIO	тър	1111	GIU	ser	arg	ser		

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PATENT APPLICATION: US/10/645,012

```
95
                                   310
                                                       315
     96
              cct cca gct gag aac gag gtg tcc acc ccc atg cag gca ctt act act
                                                                                    1008
     97
              Pro Pro Ala Glu Asn Glu Val Ser Thr Pro Met Gln Ala Leu Thr Thr
     98
                               325
                                                   330
     99
              aat aaa gac gat gat aat att ctc ttc
                                                                                    1035
     100
               Asn Lys Asp Asp Asn Ile Leu Phe
     101
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     104 <211> LENGTH: 40
     105 <212> TYPE: DNA
     106 <213> ORGANISM: Artificial Sequence
     107 <220> FEATURE:
     108 <223> OTHER INFORMATION: Description of Artificial Sequence: "IL6R1", an artificially
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     109 <400> SEQUENCE: 3
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                                                                                       40
     112 <210> SEQ ID NO: 4
     113 <211> LENGTH: 36
     114 <212> TYPE: DNA
     115 <213> ORGANISM: Artificial Sequence
     116 <220> FEATURE:
     117 <223> OTHER INFORMATION: Description of Artificial Sequence: "IL6R2", an artificially
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     118 <400> SEQUENCE: 4
     119
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                                                                                       36
     121 <210> SEQ ID NO: 5
     122 <211> LENGTH: 768
     123 <212> TYPE: DNA
     124 <213> ORGANISM: Artificial Sequence
     125 <220> FEATURE:
     126 <221> NAME/KEY: CDS
     127 <222> LOCATION: (1)..(768)
     128 <220> FEATURE:
     129 <223> OTHER INFORMATION: Description of Artificial Sequence: a designed single chain
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                                                                                       48
     132
               Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Arg Pro Ser Gln
     133
               1
                               5
                                                    10
     134
               acc ctg agc ctg acc tgc acc gtg tct ggc tac tca att acc agc gat
                                                                                       96
     135
               Thr Leu Ser Leu Thr Cys Thr Val Ser Gly Tyr Ser Ile Thr Ser Asp
    136
    137
               cat gcc tgg agc tgg gtt cgc cag cca cct gga cga ggt ctt gag tgg
                                                                                     144
    138
              His Ala Trp Ser Trp Val Arg Gln Pro Pro Gly Arg Gly Leu Glu Trp
    139
                                           40
    140
               att gga tac att agt tat agt gga atc aca acc tat aat cca tct ctc
                                                                                     192
    141
               Ile Gly Tyr Ile Ser Tyr Ser Gly Ile Thr Thr Tyr Asn Pro Ser Leu
    142
                   50
    143
              aaa tee aga gtg aca atg etg aga gae ace age aag aac eag tte age
                                                                                     240
    144
              Lys Ser Arg Val Thr Met Leu Arg Asp Thr Ser Lys Asn Gln Phe Ser
    145
                                   70
                                                       75
    146
              ctg aga ctc agc gtg aca gcc gcc gac acc gcg gtt tat tat tgt
                                                                                     288
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147 148	Leu	Arg	Leu	Ser	Ser 85	Val	Thr	Ala	Ala	Asp	Thr	Ala	Val	Tyr	Tyr 95	Cys	
149	gca	aga	tcc	cta	gct	cgg	act	acg	gct	atq	gac	tac	taa	aat	caa	ggc	336
150	Ala	Arg	Ser	Leu	Ala	Arg	Thr	Thr	Āla	Met	Asp	Tyr	Trp	Gly	Gln	Gly	330
151				100					105					110			
152 153	ago	ctc	gtc	aca	gtc	tcc	tca	ggt	ggt	ggt	ggt	tcg	ggt	ggt	ggt	ggt	384
154	sei	Leu	va1 115	Thr	Val	Ser	Ser		Gly	Gly	Gly	Ser		Gly	Gly	Gly	
155	tca	aat			aas	taa	~~~	120	~~~	~ *			125				
156	Ser	ggt Gly	Glv	Glv	Glv	Ser	2ac	Tlo	Cag	Mot	acc Thr	cag	agc	cca	agc	agc	432
157		130	011	0-1	O T J	DCI	135	116	GIII	Met	1111	140	ser	Pro	ser	ser	
158	ctg	agc	gcc	agc	gtg	ggt		aga	ata	acc	atc		tat	aga	acc	acc	480
159	Leu	Ser	Ala	Ser	Val	Gly	Asp	Arg	Val	Thr	Ile	Thr	Cvs	Ara	Ala	Ser	400
160	145					150					155					160	
161	cag	gac	atc	agc	agt	tac	ctg	aat	tgg	tac	cag	cag	aag	cca	gga	aag	528
162	Gln	Asp	Ile	Ser	Ser	Tyr	Leu	Asn	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	
163					165					170					175		
164 165	gct	cca	aag	ctg	ctg	atc	tac	tac	acc	tcc	aga	ctg	cac	tct	ggt	gtg	576
166	Ald	Pro	ьys	180	ьeu	тте	Tyr	Tyr		Ser	Arg	Leu	His		Gly	Val	
167	cca	agc	aga		add	aat	300	aat	185	~~+				190			
168	Pro	agc Ser	Ara	Phe	Ser	Glv	Ser	Glv	Ser	99t	Thr	gac	Dho	acc	ttc	acc	624
169			195				DCI	200	Der	Gry	1111	Asp	205	1111	Pne	Thr	
170	atc	agc	agc	ctc	cag	cca	qaq		atc	act	acc	tac	tac	tac	caa	cad	672
171	Ile	Ser	Ser	Leu	Gln	Pro	Glu	Asp	Ile	Ala	Thr	Tyr	Tvr	Cvs	Gln	Gln	072
172		210					215					220					
173	ggt	aac	acg	ctt	cca	tac	acg	ttc	ggc	caa	ggg	acc	aag	gtg	gaa	atc	720
174	GIY	Asn	Thr	Leu	Pro	Tyr	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu	Ile	
1 7 5 176	225					230					235					240	
177	aaa Luc	cga Ara	Thr	grg	gct	gca	cca D	tct	gtc	ttc	atc	ttc	ccg	cca	tct	gat	768
178	цур	Arg	1111	val	245	Ата	Pro	ser	vai		Ile	Phe	Pro	Pro		Asp	
	210> SEQ	ID N	io: 6		243					250					255		
	211> LENG																
	212> TYPE																
183 <2	213> ORGA	NISM	l: Ar	tifi	cial	Seq	uenc	e									
	20> FEAT																
185 <223> OTHER INFORMATION: Description of Artificial Sequence: "TMT1", an artificially																	
synchesized primer sequence																	
186 <400> SEQUENCE: 6																	
187 ggtgtcgact cccaggtcca actgcaggag ag 32																	
189 <210> SEQ ID NO: 7 190 <211> LENGTH: 32																	
	191 <212> TYPE: DNA																
192 <213> ORGANISM: Artificial Sequence																	
193 <220> FEATURE:																	
194 <2	194 <223> OTHER INFORMATION: Description of Artificial Sequence: "LINK1" an artificially																
synthesized primer sequence 195 <400> SEQUENCE: 7																	
196	ctcg	tcaca	ag to	ctcc	tcag	g tgg	gtggt	ggt	tc								32
198 <2	10> SEQ	TD N(J: 8														

RAW SEQUENCE LISTING PATENT APPLICATION: US/10/645,012 DATE: 10/15/2004 TIME: 10:22:28

Input Set : N:\Crf3\RULE60\10645012.RAW.txt
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199 <211> LENGTH: 38
     200 <212> TYPE: DNA
     201 <213> ORGANISM: Artificial Sequence
     202 <220> FEATURE:
     203 <223> OTHER INFORMATION: Description of Artificial Sequence: "LINK3", an artificially
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     204 <400> SEQUENCE: 8
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                                                                                       38
     207 <210> SEQ ID NO: 9
     208 <211> LENGTH: 63
     209 <212> TYPE: DNA
     210 <213> ORGANISM: Artificial Sequence
     211 <220> FEATURE:
     212 <223> OTHER INFORMATION: Description of Artificial Sequence: "SCP-C", an artificially
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     213 <400> SEQUENCE: 9
     214
               getgaattet tattatttat egteategte tittgtagtea agettateag atggeqqqaa
                                                                                       60
     215
                                                                                       63
     217 <210> SEQ ID NO: 10
     218 <211> LENGTH: 9
     219 <212> TYPE: PRT
     220 <213> ORGANISM: Artificial Sequence
     221 <220> FEATURE:
     222 <223> OTHER INFORMATION: Description of Artificial Sequence: FLAG peptide
     223 <400> SEQUENCE: 10
               Met Asp Tyr Lys Asp Asp Asp Lys
     224
     225
     227 <210> SEQ ID NO: 11
     228 <211> LENGTH: 34
     229 <212> TYPE: DNA
     230 <213> ORGANISM: Artificial Sequence
     231 <220> FEATURE:
     232 <223> OTHER INFORMATION: Description of Artificial Sequence: "LINK2", an artificially
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    233 <400> SEQUENCE: 11
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                                                                                       34
    236 <210> SEQ ID NO: 12
    237 <211> LENGTH: 35
    238 <212> TYPE: DNA
    239 <213> ORGANISM: Artificial Sequence
    240 <220> FEATURE:
    241 <223> OTHER INFORMATION: Description of Artificial Sequence: "LINK4", an artificially
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    242 <400> SEQUENCE: 12
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                                                                                      35
    245 <210> SEQ ID NO: 13
    246 <211> LENGTH: 36
    247 <212> TYPE: DNA
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250 <223> OTHER INFORMATION: Description of Artificial Sequence: "TMT2", an artificially

file://C:\CRF4\OUTHOLD\VsrJ645012.htm

249 <220> FEATURE:

synthesized primer sequence

248 <213> ORGANISM: Artificial Sequence

atccgcggcc gcttattatt tatcgtcatc gtcttt

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RAW SEQUENCE LISTING ERROR SUMMARY PATENT APPLICATION: US/10/645,012

DATE: 10/15/2004 TIME: 10:22:29

Input Set : N:\Crf3\RULE60\10645012.RAW.txt
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Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 23 Seq#:3; Line(s) 108 Seq#:4; Line(s) 117 Seq#:5; Line(s) 129 Seq#:6; Line(s) 185 Seq#:7; Line(s) 194 Seq#:8; Line(s) 203 Seq#:9; Line(s) 212 Seq#:11; Line(s) 232 Seq#:12; Line(s) 241 Seq#:13; Line(s) 250 Seq#:15; Line(s) 270 Seq#:16; Line(s) 280 Seq#:18; Line(s) 477 Seq#:19; Line(s) 486 Seq#:20; Line(s) 495 Seq#:21; Line(s) 507 Seq#:22; Line(s) 620 Seq#:23; Line(s) 633 Seq#:26; Line(s) 758 Seq#:27; Line(s) 838 Seq#:28; Line(s) 918 Seq#:29; Line(s) 927 Seq#:30; Line(s) 940 Seq#:31; Line(s) 1047 Seq#:32; Line(s) 1056 Seq#:33; Line(s) 1065 Seq#:34; Line(s) 1077 Seq#:35; Line(s) 1205 Seq#:36; Line(s) 1214 Seq#:37; Line(s) 1224 Seq#:38; Line(s) 1233 Seq#:39; Line(s) 1245

file://C:\CRF4\OUTHOLD\VsrJ645012.htm

VERIFICATION SUMMARY

DATE: 10/15/2004

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Input Set : N:\Crf3\RULE60\10645012.RAW.txt Output Set: N:\CRF4\10152004\J645012.raw

L:295 M:351 W: Sequence data Name/Key Feature Out-of-Range, SEQ ID#: 17, CDS LOCATION:29..2839